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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,675	11/12/2003	Sheng Hung Wang	80398P345D	8316

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EXAMINER

VO, TIM T

ART UNIT

PAPER NUMBER

2112

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/706,675

Applicant(s)

WANG ET AL.

Examiner

Tim T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

This application has been examined. Claims 1-21 are pending.

#### ***Double Patenting***

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 18-21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 9-12 of prior U.S. Patent No. 6,691,193. This is a double patenting rejection.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-17 are rejected under 35 U.S.C. § 102(e) as being anticipated by  
Gehman et al. patent number 6,260,093 referred hereinafter "Gehman".

As for claims 1, 8 and 15, Gehman teaches method and apparatus comprising: a slave access circuit (see figure 1, bridge 112, 110, 114) coupled to one of P slave devices and K slave buses to provide access to the one of the P slave devices from one of N master processors via a system bus controller (see figure 1, slave devices are resources 136, 126, 144, 118 and K slave buses are 106, 104, 108, 102 and column 3 line 44 to column 4 line 13, wherein system bus controller are bridges 112, 110, 114 utilizing address decoder to provide communication between master processors 116, 142, 132, 134 and resources 124, 118, 136, 144), the K slave buses being configured to couple to the P slave devices (see figure 1 as discussed above), the system bus controller dynamically mapping address spaces of the P slave devices (see column 3 line 44 to column 4 line 13, wherein the bridges utilizing address decoders 130, 148, 132, 140 to connect to resources); and a slave bus decoder coupled to the slave access circuit to enable the one of the P slave devices to connect to one of the K slave buses when the one of the P slave devices is addressed by the one of the N master

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processors (see figure 1, decoders 122, 130, 140, 148, master processors 116, 142, 132, 134), the slave bus decoder being controlled by the system bus controller (see figure 1 and column 3 line 44 to column 4 line 13).

As for claims 2, 9 and 16, Gehman teaches wherein the slave access circuit comprises: K bus buffers coupled to the K slave buses to buffer bus signals corresponding to access signals to the one of the P slave devices, the K bus buffers being enabled by the slave bus decoder (see column 4 lines 1-6, wherein the decoder 130 selects bridge 112 to enable read/write as disclosed in column 4 lines 45-48).

As for claims 3, 10 and 17, Gehman teaches wherein each of the K bus buffers is connected to each of the K slave buses (see figure 1, wherein bridges 112, 110, 114 comprising buffers for transferring data to devices connecting to different buses 106, 104, 108, 102).

As for claims 4 and 11, Gehman teaches method and apparatus comprising: an arbiter to arbitrate access requests from N master processors via N master buses (see figures 1-2, arbiters 120, 128, 138, 146, master processors 116, 132, 134, 142 and column 3 lines 18-30), the arbiter generating arbitration signals (see figure 2, Grant signals column 4 lines 36-40, wherein the arbiter generates a grant signal); a mapping circuit to store mapping information to dynamically map an address space of P slave devices coupled to K slave buses based on the arbitration signals (see figures 1-2 address decoders 122, 130, 140, 148 and column 3 line 44 to column 4 line 13); and a switching circuit coupled to the arbiter and the mapping circuit to connect the N master buses to K slave buses based on the arbitration signals and the mapping information

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(see figure 1, bridges, arbiters and decoders).

As for claims 5 and 12, Gehman teaches a slave access decoder coupled to the arbiter and the N master processors to decode addresses issued by the N master processors, the slave access decoder generating control signals to P slave interface circuits, each of the P slave interface circuits being connected to each of the P slave devices (see figure 1).

As for claims 6 and 13, Gehman teaches wherein the mapping information is provided by a supervisor processor (see figure 1, decoders).

As for claims 7 and 14, Gehman teaches wherein the mapping information is accessible to the N master processors (see figure 1, master processors 116, 132, 142).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim T. Vo  
Primary Examiner  
Art Unit 2112

6/26/04

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